



U.S. Global Change Research Program

## National Climate Assessment

# National Climate Assessment Indicator System

## Physical, Ecological, and Societal Indicators of Change

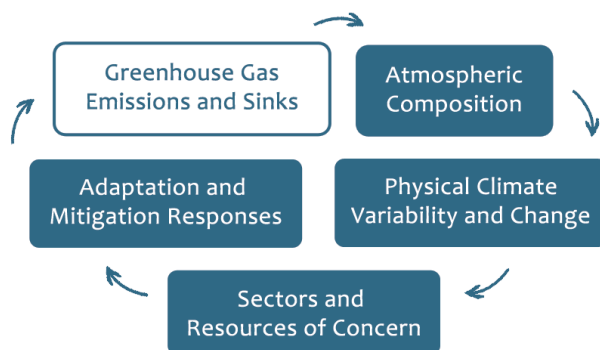
### National Climate Assessment

The National Climate Assessment (NCA) is an important resource for understanding and communicating climate change science and impacts in the United States. It informs the nation about observed changes, the current status of the climate, and anticipated trends for the future. The NCA report process integrates scientific information from multiple sources and sectors to highlight key findings and significant gaps in our knowledge. In addition to periodic reports, the sustained assessment process includes ongoing studies, activities, and information sharing. An important element of this process is the development and implementation of an indicator system.

Indicators typically consist of summary measurements or calculations that represent important features of the status, trend, or performance of a system of interest (e.g. the economy, agriculture, air quality).

### Indicators System

A system of physical, ecological, and societal indicators, based on key information about the physical climate, climate impacts, vulnerabilities, and preparedness, provides both decision-makers and the public with scientifically valid information that is useful for decision-making. As a part of the sustained assessment process, the indicators will be tracked, reviewed, and updated to reflect changes in our understanding and in climate conditions. Teams of scientists and potential users are currently developing the indicator system. After it has been externally reviewed, it is expected that the indicator system will launch in 2015.



**Categories of Indicators: Framework for the National Climate Assessment Indicator System.** This end-to-end framework includes the cyclical linkages between greenhouse gases, changes, impacts, and responses. The physical, ecological, and societal indicators could inform us of status, rates, and trends in each of these categories.

### Goals

The goals for the NCA indicators are to:

- provide meaningful, authoritative climate-relevant measures about the status, rates, and trends of key physical, ecological, and societal variables and values;
- inform decisions on management, research, and education at regional to national scales;
- identify climate-related conditions and impacts to help develop effective mitigation and adaptation measures; and
- provide analytical tools by which user communities can derive their own indicators for particular purposes.

### How to Participate

The NCA is convening workshops and other meetings to develop the indicator system and research agenda. At these sessions or via email, the scientific community and the public are invited to comment on the overarching vision for indicators, to discuss needs for specific indicators, and to provide descriptions and supporting information for indicators for consideration in the NCA indicator system.

### NCA Indicators Technical Input Report

<http://downloads.usgcrp.gov/NCA/Activities/NCA-Indicators-Technical-Input-Report-FINAL--3-1-12.pdf>

Please visit [www.globalchange.gov](http://www.globalchange.gov) to learn more about NCA activities and opportunities for involvement, and sign up online for our periodic newsletter. Contact us at: [indicators@usgcrp.gov](mailto:indicators@usgcrp.gov).



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